DOCUMENT RESUME

ED 231 221 FL 013 780

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TITLE Intersentential Codeswitching: An Educationally Justifiable Strategy.
PUB DATE Jun 83
NOTE 29p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Bilingual Education; *Bilingualism; *Classroom Communication; *Code Switching (Language); Discourse Analysis; Elementary Education; *English (Second Language); Language Acquisition; Mexican Americans; Second Language Learning; *Spanish; Teaching Methods

ABSTRACT

The language separation approach to bilingual teaching is compared to three kinds of language alternation approaches, "flipflopping," "concurrent translation," and the "New Concurrent Approach" (NCA). The approaches are categorized as conventional, unstructured, and structured, respectively. The effectiveness of the NCA is compared favorably to the other approaches in terms of San Antonio's Title VII demonstration project in bilingual methodology. Five NCA class segments are analyzed with special emphasis on description of corpus, teacher talk, and student talk. Transcriptions of teacher-student dialogs are included. The discussion stresses that through sufficiently long speech samples in each language the child develops the languages simultaneously. This is demonstrated by the grammaticality of almost all child responses. Furthermore, children have developed interlinguistic flexibility as they alternate between languages with ease. It is concluded that the reservations held by many in regard to language switching in the classroom do not hold for NCA as this approach enables the child to develop the home language, become proficient in the majority language, and learn the school subjects at the same time. (AMH)

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ED231221

INTERSENTENTIAL CODESWITCHING: An educationally justifiable strategy

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INTRODUCTION

Data concerning bilingual instructional methodology are still scarce, although some bilingual educators have recently come to realize that it is no longer enough to support bilingual education in principle but that there is a need to gain greater specific knowledge as to what actually works in a bilingual classroom. The question as to how one teaches bilingually must be addressed if he/she wishes to argue that bilingual education is preferable to monolingual education when teaching children from homes where a non-English language is the usual means of communication. This of course involves coming to grips with the kind of language distribution that is desirable for the classroom. Should the teacher switch back and forth from the school language to the home language, either randomly or by means of consecutive interpretation techniques? Should the teacher separate the two languages such that certain subjects are taught in L_1 and others in L_2? Or rather, should the teacher alternate between the two languages by controlling its distribution by the adherence to a structured pattern that allows the child to learn through both languages? This latter approach is now gaining recognition and beginning to generate research data of significance.

(1) LANGUAGE DISTRIBUTIONAL PRACTICES, -- a brief survey. The few references available on the topic of language distribution in bilingual education (Andersson & Boyer, 1970; Cordasco, 1970; Gaarder, 1975; U.S. Commission on Civil Rights, 1975) have stressed the need for keeping home and school language separate from one another, either by assigning different time slots for either language or by using one language to teach, say, Social Studies, Art, Music and Physical Education and the other language, to teach Math, Science and

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Health. This strict separation of languages may be considered the most widely supported method of bilingual instruction, although the literature does not include a single study that proves the superiority of the language separation approach over other methods of bilingual instruction. Educators who support this conventional method of instruction object strongly to the flipflopping approach whereby the teacher alternates "randomly" between the school and the home language to overcome comprehension hurdles that some home language dominant children experience when taught in the school language, e.g.

T: This is a seed. ¿entienden? We plant it en la tierra para que eche raices. To make it grow fast, we water it. Le echamos agua and then the plant grows a stem and leaves. ¿Qué más tiene la planta?
ST: Hojas and a flower.
T: Have you all seen plants with leaves and flowers?
ST: (no response)
T: Han visto Uds. plantas con hojas y flores.
ST: Yes.

Obviously, the meaning is conveyed to the children but the intrasentential switching may here interfere with the teacher's language development objectives. The conventional bilingual educator objects equally to the concurrent translation approach where everything that is said in the school language is also said in the home language. In this approach, the child can achieve academically, i.e. learn the subject of a lesson, without ever acquiring English. The preceding science lesson would go something like this:

T: This is a seed. Esta es una semilla. We plant it in the soil to develop roots. La sembramos en la tierra para que eche raices. To make it grow fast, we water it. Para que crezca rápido, le echamos agua. The plant then grows a stem and leaves. La planta produce entonces un tallo y las hojas. What else does a plant have? ¿Qué más tiene la planta?
ST: Tiene hojas y una flor.
T: Have you all seen plants with leaves and flowers? ¿Han visto Uds. todos unas plantas con flores?
ST: Si, maestra.

Recent studies in bilingual methodology by the presentor have led to the development of a different type of language alternation approach which avoids the

randomness of the flipflopping and the redundancy of the concurrent translation. The New Concurrent Approach makes use of intersentential, or rather interthought group codeswitching, such that certain segments of the lesson are taught in L_1 and others, in L_2. The alternation is initiated by the teacher only and as the result of a response to a given cue that he/she identifies in the class. The teacher switches languages only if he/she can rationalize, on linguistic, educational or attitudinal grounds, that the alternation at a given point will improve the quality of the lesson. The two languages are distributed at a ratio of 50-50 and the transitions from one to the other language are smooth enough never to disrupt the continuity of the lesson. The preceding samples could be adapted to the NCA Method as follows:

T: This is a seed. We plant it in the soil to develop roots. To make it grow fast, we water it. Después que la planta ha echado sus raices y la hemos regado bastante, produce un tallo y las hojas. ¿Qué más tiene la planta?
ST: Tiene hojas y una flor.
T: Muy bien, tiene hojas y a veces tiene también flores. Have you ever actually seen plants with leaves and flowers?
ST: Yes, in my backyard.

The first switch to Spanish occurs after three complete sentences have been uttered in order to expose the child to a number of grammatical structures in English as the science concept is taught. The continuation of the lesson in Spanish allows for conceptual reenforcement and lexical enrichment (plantas, raices, regar, tallo, hojas). The second switch, back to English, occurs at the end to explore the child's actual experience. The child's Spanish answer is however first acknowledged and expanded to ensure him/her that the answer was correct. This structural approach to language distribution, it is here argued, serves the parallel development of both languages necessary for the academic achievement of the bilingual child.

(2) CRITICAL ASSESSMENT. On the basis of the methods surveyed in the preceding section, bilingual instructional methodology consists of three different approaches, i.e. (a) the conventional approach (language separation by time or

topic), (b) the unstructured approach (flipflopping or concurrent translation) and (c) the structured approach (new concurrent approach). Neither the conventional nor the unstructured approach have been formally tested in regard to their relative effectiveness but even before assessing them more rigorously, some shortcomings are evident in all of them, thus making it quite difficult for the teacher to select one and not the others.

(a) The conventional approach: If the language separation is based on the time factor, it is highly improbable that any teacher can teach all school subjects twice, once in the school language, English, and once in the home language, say, Spanish. One of the languages will have to give and, because of the need to attain the proficiency level in English, the child will not receive the amount of instruction in Spanish that the bilingual program requires (e.g. preview-review). On the other hand, if the language separation is based on the content factor, there is no convincing argument available to single out a school subject as more appropriate for the teaching in Spanish and another, for the teaching in English. Furthermore, once a decision, arbitrary as it may be, is made, say, to teach Social Studies in Spanish and Math or Science in English, lexical and even conceptual deficiencies are noticeable when the subject matter is discussed in the language other than the one in which it was taught.

(b) The unstructured approach: If the language alternation is accomplished by means of mixing the two languages or, at best, by some variety of intrasentential codeswitching, the child is not exposed long enough to any one language to derive from the teacher's talk the grammatical, semantic and lexical rules of English nor Spanish. As a matter of fact this approach may increase the child's difficulty to tell one language apart from the other, although the conceptual meaning of whatever is taught may be understood by him/her. On the other hand, if the language

alternation is accomplished through sentence-by-sentence translation, comparable to the consecutive interpretation technique in court procedures, all incentive to acquire the school language is lost as the child will phase him/herself out when the unfamiliar language is spoken as the lesson content can be fully understood by simply listening to the teacher's familiar home language version. In this latter approach a child may achieve academically without ever becoming proficient in English.

(c) The structured approach: The New Concurrent Approach developed by the presentor during the last seven years in South and South-central Texas attempts to correct the above shortcomings. It has been defined in the literature (Jacobson, 1978; 1981; forthcoming;) as an approach through which the bilingual teacher teaches the school curriculum (except language arts) in the child's two languages concurrently, that is, switching from one to the other language as the teaching/learning situation may require. Each switching instance shall be pedagogically justifiable in light of four criteria:

(1) The languages are distributed at an approximate ratio of 50-50;

(2) The teaching of content is not interrupted;

(3) The teacher is conscious of his/her alternation between the two languages; and

(4) The alternation accomplishes a specific learning goal.

The structured alternation allows for the parallel development of both languages and avoids the concerns raised in regard to time and content. English and Spanish are distributed evenly and every school subject -- except language arts -- is taught in meaningful, justifiable alternation patterns. The teacher remains in each language long enough -- at least for one sentence but most often for much longer -- to allow the child to derive from each exposure the pertinent linguistic structures and, by the same token, to recognize one series of sentences as English and the other as Spanish. The redundancy of translations is avoided completely

as nothing is actually translated. Simply, the lesson is taught in two languages but without breaking up the continuity of the lesson plan. Finally, the guidance provided in terms of language choice by the teacher leads the child effectively to internalizing a strategy that characterizes every bilingual person, that of alternating between two languages as the social situation may so demand. In order to determine whether the NCA (New Concurrent Approach) Method actually contained the advantages listed above, the presentor submitted to the U.S. Department of Education a proposal for the funding of a Title VII Demonstration Project in Bilingual Methodology that would permit the comparison of two bilingual methods on a longitudinal basis, in order to gather hard data on the relative effectiveness of the approaches used in teaching groups of comparison and treatment students. The Project that is now in its second year of implementation is described briefly in the following section.

(3) THE TITLE VII DEMONSTRATION PROJECT IN BILINGUAL METHODOLOGY. Because of the time constraint a full description of the Project cannot be included but a brief discussion of its language distributional aspects as they relate to the present paper may be in order. The project was proposed, basically, to compare two bilingual instruction methods, the New Concurrent Approach (NCA) and the Language Separation Approach (LSA). Two schools of San Antonio's Southwest Independent School District are participating, one of which serves as the comparison school and the other as the treatment school. In 1981-82 a kindergarten and a first grade were identified in two of its schools in order to implement the NCA Method in a treatment school and the LSA Method in a comparison school. The LEP (Limited English Proficiency) children admitted to these grades moved up to grades 1 and 2 during the current year and will be in grades 2 and 3 during 1983-84, so that their progress over three years of primary schooling can be assessed and the effect of the methodological variable be measured qualitatively and quantitatively.

Each classroom operates with a certified bilingual teacher and a bilingual aide who work together in a teamlike setting. Although the major teaching responsibility lies with the teacher, the aide also teaches occasionally under the supervision of the teacher, the program coordinator or both. The Project is receiving the necessary funds to purchase equipment and to supplement district materials, so that the children have in their classes everything to make the learning experience a challenging one. The following three methodological settings describe the language distributional features of the Project.

(a) Home language development and second language acquisition: The development of Spanish language and the acquisition and/or further improvement of English is an ongoing process during the three years of the program. At the kindergarten level it is however most obvious how the groundwork is laid for the children to function successfully in each of the methodological settings. Based upon the work of Jim Cummings and his associates (Cummins 1979, 1980) the program design gives particular attention to the development of the vernacular and the attainment of the threshold level in the child's first language. Ninety percent of the teaching at the pre-primary level is therefore in Spanish allowing only 10% of time for ESL instruction. There is almost no difference at this level of instruction between the comparison and the treatment groups except for the fact that, whereas the ratio of 90-10 is kept invariable for the latter, it is gradually modified for the former to arrive at a ratio of 75-25 by the end of the kindergarten year. The decrease of the home language and the increase of the majority language is the conventional procedure in bilingual programs and conveys to the child an implicit judgment concerning the relative values of his/her two languages which is avoided in the distributional pattern of the treatment groups.

(b) Language Separation Approach (LSA) on the basis of school subjects. An arbitrary choice is here made to teach Math, Science and Health in English and

Social Studies, Art, Music and Physical Education in Spanish to all comparison students. The decrease-increase pattern is continued so that by the end of Grade One 50% by the end of Grade Two 75% and by the end of Grade Three 100% of the instruction is in English. It is predicted that even with the reduction of Spanish over the three years of the program, the children will have reached their threshold level in the first language and perform academically well as they move to the end of the program. It is also predicted that, because of the decrease in the use of Spanish, their Spanish language proficiency will however suffer and, by the same token, will the attitude to the use of Spanish at school. The children's academic achievement, especially in the subjects taught in English, will be good but not superior.

(c) New Concurrent Approach (NCA) in content teaching only. The New Concurrent Approach (NCA) Method is used in all content classes. Accordingly, language alternations are always teacher-initiated. They are never shorter than one sentence but usually as long as 10 sentences or above depending on the length of the thought group or any other important reason for the switch. The switches occur in response to cues that the teacher identifies in the classroom. Some of these cues are from the broader area of Classroom Strategies, others from such areas as Curriculum Language Development, or Interpersonal Relationships.* Language arts proper is taught in the language to be developed further or upgraded. In the content areas, the ratio of distribution remains stable from grade 1 to 3 at 50-50 or as close to it as possible. A positive attitude toward both languages is stressed at all times as is the favorable attitude to the child's ethnic heritage but avoiding any feeling of marginality. In other words bicultural education is made to go hand-in-hand with bilingual education. It is predicted that the children will develop both languages fully and improve their self-identity considerably. They will not only reach the threshold level in the first language but be motivated

*For greater detail, see R. Jacobson, "The Implementation of a Bilingual Instruction model: The New Concurrent Approach" in R.V. Padilla, ed. Bilingual Education Technology, 1981, Ypsilanti, MI: Eastern Michigan University.

to speaking the vernacular whenever its use is appropriate. It is also predicted that the children will achieve academically extremely well, as a matter of fact, better than the comparison groups. Finally, the treatment groups will have acquired the sociolinguistic knowledge to address people as warranted by the situation and to judge situations according to appropriateness for code selection.

(4) ANALYSIS OF FIVE NCA CLASS SEGMENTS. Final conclusions concerning the success of the Project must await its termination (1984). Some tentative findings can however be reported at this point already. An analysis of five class segments consisting of lessons taught in the NCA Method shall be described and its relevance to the potential outcome of the Project be briefly referred to. (see section 5 below)

(a) Description of corpus

Five class segments consisting of a total of 3,844 words have been recorded on audio-tapes. The recordings represent two Math classes, two Social Studies classes, and one Science class. The first and second grade teachers conducting the classes are both regular teachers in the treatment school and experienced in the use of the NCA Method. Both teachers have been working in the Project since its beginning (Fall 1981), although one of them was assigned to the comparison school during the first year, whereas the other had been teaching at the treatment school both years? Ms. AG taught one of the Math lessons and Ms. EGR the remaining lessons of the total inventory of which 1,785 were Spanish words and 2,059, English words. This distribution of the two languages adjusts itself well to the program design as Spanish was spoken 46% of the time and English, 54%. The deviation of only 4% in favor of English is considered insignificant.

(b) Teacher talk

The teachers alternated between languages 39 times, an average of 7.8 alternations per lesson. The exact breakdown has been as follows:

Class Segment	Subject	Teacher	# of alternations	Topic	Grade
I	Math	AG	5	Wholes and halves	1
II	Math	EGR	2	Addition	2
III	Social Studies	EGR	8	Security, occupations	2
IV	Social Studies	EGR	7	Community helpers	2
V	Science	EGR	7	Insects	2

The shorter samples of teachers' talk range from one to 29 words. Only in one instance a sentence in English contains, for purposes of emphasis, a Spanish clause when Ms. EGR says:

[1] That's right, we did talk about looking both sides, viendo para los dos lados. (III, B/C:1)

Although this is an instance of intra-sentential codeswitching, it is worth noticing that, the English sentence structure had already been completed. All the remaining short utterances consist of one, two, three or six complete sentences. One incomplete sentence can be interpreted as an unsuccessful question technique to elicit the child's response.

[2] T: ....They have...

ST: No.

T: They have wings. The butterfly can fly. (V, F:1-3)

The longer uninterrupted samples of teacher talk surpass one hundred words and occasionally reach the 300's or 400's. There is usually only one such very long intervention in each class segment except for III where there are three:

Class segment	Words	Language	Words	Language	Words	Language
I	464	English				
II	336	English				
III	120	English,	217	Spanish,	356	English
IV	276	Spanish				
V	129	Spanish				

There seems to be no preference for any one language for these longer interventions as four of them are in English and three in Spanish. Obviously, one is here dealing with a multiple number of sentences in one single language, so that the child's

language exposure becomes almost like the one in a monolingual class. The teachers set, as expected, the pattern for language choice. Children violate the agreement only six times saying a total of sixteen words in the unelicited language:

III, E:14-17	T:	Otra persona más, ¿Richard?
	ST:	In the army.
	T:	¿Qué?
	ST:	In the army. Trocas
III, F:32-33	T:	Here is -- let's watch her -- Mrs. Wonderful. Come on.
	ST:	Dale, dale
III, G: 21-22	T:	Ahora, vamos a ver. Algun doctor?
	ST:	A doctor.
V, B: 4-7	T:	Spiders. Anything else, Jorge?
	ST:	Gusanos.
	T:	What?
	ST:	Worms.
V, B:8-10	T:	Alex?
	ST:	Cucarachos [!] (laughs)
	T:	Spring bugs, cockroaches, ah?
V, G:1-3	T:	¿Quién puede decir esta palabra? ¿A ver, esta palabra?
	ST:	Ms. EGR may I go ...
	T:	No, nosotros estamos acá .....

This represents 4.03% of the children's utterances. Otherwise, they have followed strictly the convention of responding in the language in which they have been addressed, allowing hereby the teacher to select the language of instruction each time.

(c) Student talk

Children in the lower primary grades do not engage in a great deal of talk and limit themselves, almost exclusively, to answering questions in incomplete sentences; e.g.

[3a] T: No, we are not coloring wholes, we are coloring halves. All right. Now, we have another object down at the bottom, what's its shape?
ST: Pear.
T: Pear, good. What color is around it?
ST: Green.
T: OK, is it green?
ST: Brown. (I, B, 38-44)

or

[3b] T: .....¿Quién más me puede decir lo que dijeron la vez pasada? ¿Ramona? ¿Qué? hacía tu papá entonces?
ST: Es cajero.

T: Oh, es cajero. Alex?
ST: Trabaja en guerra. [!]
T: ¿En guerra? Está, ... es militar tu papá?
ST: Soldado.
T: Gracias, Felipe. ¿Es soldado?
ST: Si. (III, E:8-13)

The word count of children's responses as compared to teacher talk amounts in view of the shortness of their answers to only about 11.5% of class talk. Whereas children uttered a total of 397 words, teachers said 3,447. In some classes however children seem to talk more than in others as the following table illustrates:

Alternate	MATH (I)	MATH (II)	SOCIAL STUDIES (III)	SOCIAL STUDIES (IV)	SCIENCE (V)
A	1	14	12	4	17
B	23	10	0	12	13
C	6	24/395=6.08%	6	8	0
D	6		11	7	5
E	6		25	6	17
F	42/809=5.19%		44	3	8
G			65	0	12
H			0	40/585=6.8%	0
I			163/1,012=16.11%		5
J					14
K					17
L					5
M					0
N					0
O					10
P					1
Q					4
					128/1,033=12.39%

The grammaticality of the responses is often difficult to determine as most of them are limited to one or two words. However, these very short responses fit grammatically into the sentence pattern used by the teacher to elicit the response, e.g.

[4] T: .....First they drew what?
ST: [They drew] a line. (I, B:7-8)

or

[5] T: If something real bad happens to you, what do we call that?
ST: [We call it] danger. (III, D:18-19)

or

[6] T: Las cositas negras que vemos aquí mucho, ¿cómo se llaman?
ST: [Se llaman] arañas. (V, A:15)

The grammaticality of the responses is more obvious when longer utterances are used. The following longer than 2-word responses are in the corpus:

[7]	Sumar el 3 y [el] 2	(II, A:8)
[8]	¡Que se paren cuando pasa un carro.	(III, A:3)
[9]	Mirar a los dos lados	(III, A:5)
[10]	Para cuando la luz está roja.	(III, C:2)
[11]	They could be dead.	(III, D:13)
[12]	Trabaja en los botes.	(III, E:4)
[13]	Trabaja en [cosas de] guerra.	(III, E:9)
[14]	By taking you to the house.	(III, F:4)
[15]	Taking us to the city.	(III, F:6)
[16]	They take you wherever you want to.	(III, F:9)
[17]	Take the bus.	(III, F:42)
[18]	By driving them to the hospital safely.	(III, F:52)
[19]	Ganando la guerra ayuda a la gente.	(III, G:5)
[20]	Le habla y le dice que como que [necesita que le traigan] una tierra.	(III, G:14)
[21]	Cuando tenemos un bebito, nos puede cuidar.	(III, G:30)
[22]	Cuando están mal(os).	(III, G:33)
[23]	Cuando le da calentura.	(III, G:36)
[24]	How about you?	(IV, A:3)
[25]	It's big.	(IV, E:4)
[26]	It's softlike.	(IV, E:6)
[27]	Las hormigas tienen más que cuatro.	(V, E:7)
[28]	La hormiga tiene ocho.	(V, E:10)
[29]	Mrs. EGR, may I go?	(V, G:2)
[30]	Some of the masters have four right here.	(V, J:6)

Only five responses are minimally deviant but seem to be attributable to child language rather than lack of language proficiency due to other-language dominance. Also note that of the responses [7], [13], [20], [22], and [26], four are in Spanish and only one in English.

None of the responses reflect lack of comprehension as children answer all questions asked and provide meaningful clues to what is discussed in class. This assessment is of course made only on the basis of the children who responded. To conclude, the children's responses, in spite of their brevity, are grammatical and do reflect comprehension. Obviously, alternations occur, with very few exceptions

(4%), only when triggered by the teacher. No mixing nor intrasentential codeswitching is noticeable in the entire corpus.

(5) DISCUSSION. The cited segments of five content classes as transcribed from the audio-tape recordings have shown that the children are exposed to sufficiently long speech samples in both languages each time that a teacher talks. The child has no difficulty in upgrading English when English is spoken and upgrading Spanish when Spanish is spoken. The alternation patterns of the NCA Method lend themselves to develop both languages in a parallel fashion as content is taught. The parallel development of English and Spanish is tied closely to the recognition that Spanish is as prestigious as English and that any school subject can be learned regardless of the language in which it is taught. The shortness of the children's responses is not language-specific; hence, it cannot be blamed on bilingual education nor on this particular method (NCA). More likely, it is the result of children's shyness in a formal class situation. Increased child talk could be accomplished by more innovative strategies that call for greater participation of children in the learning process.

The parallel language development is evidenced by the grammaticality of almost all the responses, whether they are single words, phrases, clauses or full sentences. The five deviancies cited above are cases in point. The omission of the second occurrence of the definite article el is an interference from another potential structure, sumar 3 y 2 [7]. The absence of cosa de or asuntos de is a child language deletion [13]. Sentence [20] is the most deviant one as it is almost incomprehensible without the insert necesita que le traigan. The child did not have the necessary vocabulary to get his message across. Cuando están malos instead of cuando están mal is a common colloqualism [22] and the use of softlike in [26] instead of kind of soft shows the child's familiarity with morphological processes. None of the deviancies represents interlanguage interference.

There is only one attempt made by a child to answer in English, whereas the question was in Spanish (III, E:15 and 17). This shows that the children feel equally competent in thetwo languages and it does not matter whether they respond in one or the other language. The adherence to the language choice pattern set forth by the teacher is almost total. The few exceptions (see above) can be explained as out-of-school experiences, like dale (III, F:33) and doctor (III, G:22), subconscious switches, like gusano (V, B:4) and Ms. EGR may I go? or humor, like Anglo-accented cucaracho [!] (V, B:9).

Intrasentential codeswitching is avoided by the children in the entire corpus and so is all kind of language mixing. In the very few cases where the child thought of the word or words in the other language first, he/she would stay entirely in that language, e.g. Ms. EGR may I go?, a doctor but not *Sra. EGR, may I go or *un doctor.

The children have developed interlinguistic flexibility as they alternate between languages with apparent ease. Obviously, the teacher's language switch does not present a comprehension hurdle. It is as if both language controls were constantly open so that the child might function in either language at all times. Regardless of his/her alertness to the switch, he/she captures the message that is conveyed. In other words, the alternation does not disrupt the continuity of the lesson. The learning of the subject matter goes on regardless of which language is spoken at a given moment. Hence, the child who is motivated to do well in class does not let him/herself phase out when one of the languages is spoken as he/she would then miss an important part of the lesson. In sum, the NCA Method may very well be the answer to how to teach the minority child bilingually as it brings together three very important objectives, i.e., dual language development, attitudinal growth and academic achievement.

To return briefly to the Title VII Demonstration Project in Bilingual Methodology, the presentor envisions an important feedback from it in that it will provide, after its third year of implementation, qualitative and quantitative data on the merits of the NCA Method. Plans are presently underway to replicate the Project and to make its results available to a larger audience. The adaptation of NCA to other hispanic or non-English settings might become a future goal, if and when the mentioned data support the tentative findings described in this paper.

CONCLUSION. The preceding analysis and discussion of five class segments taught in the New Concurrent Approach Method by especially trained bilingual teachers shows that the reservations held by many bilingual educators in regard to language switching in the classroom do not hold for this type of language alternation method. This approach does NOT promote language mixing nor confusion as the children learn to keep the two languages apart from one another, distinguish them clearly and comprehend all parts of the lesson as evidenced in the transcriptions. It does NOT encourage failure to acquire English as the child cannot anticipate when alternations occur/nor whether the same topic will be taught in his/her dominant language at a later point. Rather, it enables him/her, as he/she learns the school subject, to develop further the home language and to become at the same time proficient in the language of the majority. Having become literate in both languages, the child can now achieve academically according to aptitude and do well in the broader society.

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Ms. AG

Subject: Mathematics (I) Topic: Wholes and Halves Word Count: 809

Alternation

A
Spanish:71 words
(ST:1;T:70)

T: Vamos a pintarlo de este lado, ¿OK? El lado derecho. ¿Se puede pintar este lado?
ST: Si.
T: Si, pero si pintamos este lado, no podemos pintar el lado derecho. Si vamos a pintar el lado izquierdo, no se puede pintar el lado derecho. Así que hoy día todo lo que vamos a hacer es pintar la mitad de un objeto. Primero tenemos un objeto total [entero] y despues vamos a pintar la mitad. /

B
English:487 words
(ST:23;T:464)

Look at your book on page 117 now. Now you can look at the book. On that page we have six objects. You have a leaf, right, you see it? You have a heart, you have a kite, you have a butterfly, you have a pear, and you have an apple, right? OK, we see 6 objects. Of those six objects do you see the leaf up at the top. What do they do to show you half?
ST: Cut it, color it.
T: OK, good. First they drew what?
ST: A line.
T: A line down the ...
ST: leaf.
T: ... middle, good. They drew a line from the top to the bottom right through the middle of the leaf and then they colored part of the leaf green. Look at your heart. What color is a heart usually?
ST: Red.
T: Red. So, we just want to color half of the heart. What color are you going to color it?
ST: Red.
T: Red. Color only one half of the heart red. Do we color the whole heart? No, just half of the heart. Get your red crayola and color half of the heart. One half of the heart. If you don't have a red crayola you may use pink or purple or something like that, along that line or just use it. Any crayola that color to show me half .. half of the heart. OK, we can take a little more time later to do it a little bit more carefully. Right now, let's go to the next row. You see your kite or diamond shape. You may use... what color is around this kite?
ST: Blue.
T: Blue, OK. We are going to color only one half of the kite, blue. OK, that's good. Let's go to the next object. We have a shape that looks like a what?
ST: A butterfly.
T: A butterfly, good. We see what colorline around it.
ST: Green.
T: Green. Let's use yellow, OK. If you have yellow, color half of the butterfly yellow. If you don't have a yellow, you may go ahead and use the green but I wanted yellow because we have already used green once. Just one half, remember. That can be the whole thing?
ST: No.
T: No, we are not coloring wholes, we are coloring halves. All right. Now, we have another object down at the bottom, what's its shape?
ST: Pear.
T: Pear, good. What color is around it.
ST: Green
T: Ok, is it green?
ST: Brown.
T: OK, brown, all right. Get out your brown crayola. Color how much of the pear?

ST: Half.
T: Half, good. Just color one-half of the pear brown. This is pretty easy. Don't you think?
ST: Yes.
T: So, if we have an even-sided object, we can color just half. And the last object is an ..
ST: ... apple.
T: Apple. They used what color?
ST: Red.
T: Red or orange. You have an orange? You have an orange crayola?
ST: Yes.
T: Color what part of the apple?
ST: Half.
C
Sp: 91 words
(ST:6;T:85)
T: Just half, good. Half of your apple orange. //Muy bien. Si me estaban escuchando, se fijaron que todos estos objetos, primero empezaron en total [enteros!] ¿Verdad?
ST: Si.
T: ¿Qué pintamos? ¿No más qué?
ST: Un lado.
T: Un lado, un medio de cada objeto, ¿Verdad?
ST: Si.
T: En cada objeto usamos diferentes colores. No mas para distinguir los diferentes objetos que son. ¿Verdad? Tuvimos una hoja, ¿Verdad?
ST: Si.
T: Un Corazón, una huila, una mariposa, ¿verdad? Una pera y una manzana. Así es que cuando un objeto está en total [entero.] se puede dividir en medio, [mitades] ¿Verdad?
ST: Si.
D
E: 58 words
(ST:6;T:52)
T: En cada [uno] de estos objetos si es posible. //Now look at the next page. If you turn your page you are going to see some other objects here and they are a little bit different because they are a little bit more real. Right?
ST: Yes.
T: You see what?
ST: Bugs.
T: You see some bugs, you see...
ST: ... leaves.
T: You see some leaves.
ST: ... hearts.
T: Hearts.
ST: ... rockets.
T: Rocket.
ST: Turtle.
E
Sp: 102 words
(ST:6;T:96)
T: Turtle, //Ahora con cada [uno] de estos objetos, ¿qué van a hacer con ellos?
ST: Pintarlos
T: Lo van a pintar?
ST: Un lado.
T: No mas un lado. Por medio [la mitad] ¿verdad? Por medio [las mitades] ven Uds. que los dividen con [por] una linea, ¿verdad? ¿Ven Uds. los insectos que hay?
ST: Si.
T: Ven que son redondos, no?
ST: Si.
T: Como un círculo. Así que tiene una linea de arriba a abajo para partirlo, para dividirlo por medio [la mitad]. Asi que (es en) un lado, van a pintar [lo] de qué color? ¿Qué usaron ellos?

ST: Rojo.
T: Rojo, así que es [que en] cada animal van a pintar no más parte del animal, medio [la mitad] del animal rojo.

Ms. EGR

Subject: Mathematics (II) Topic: Addition Word Count: 395

Alternation

A
Sp:99 words (ST:14;T:35)

T: Treinta y seis más veinticuatro.
ST: (on the blackboard) 36 mas 24.
T: ¿Qué vas a hacer?
ST: Sumar 6 y 4.
T: Bien.
ST: (continues at the blackboard)
T: Luego.
ST: Sumar el 3 y 2.
T: Muy bien.
¿Qué tantas unidades tenemos en la respuesta?
ST: Cero.
T: Cero y ¿qué tantas unidades, perdona, decenas.
ST: Seis.

B
E: 346 words (ST:10;T:336)

T: Seis. Cero unidades y seis decenas. // Now I gave you a sheet of paper and at the very top you have [a] one if you start from the right to the left We have a one. What is next to the one.
ST: Ten.
T: Ten, and then ...
ST: Hundred.
T: Hundred, thousand and ten thousands.
This sheet is going to help you to add a bunch of numbers and this is the way we are going to do it. Say 12347 plus 56312. OK, can you add this number? You think you can do that?
ST: Yes.
T: OK. What do we do first?
ST: Teacher, teacher.....
T: OK, Angie
ST: (at the blackboard)
T: OK, go ahead.
ST: (works)
T: Talk to us while you are doing it. What's that?

ST: Eight.
T: No.
ST: Nine.
T: Would you hurry up? OK, now let's see if it's right. The first thing that you are going to do is that we are going to put this 12347 number which is 12,347 in these little squares, so this is what you are going to do. We are going to start with the 7. Seven is going to go into this number. You are going to write, everybody, (1,000) [in thousands] 12,347 OK on your paper plus 56,312, on the side just the way I did.
ST: 12,000
T: 12,347. It's just the way it's on the board. OK this is the way we are going to do it. In the first, this is the one-section, right? This is the tens, hundreds, thousands, tens of thousands. OK, we have the ones here, tens, hundreds, thousands and tens of thousands. This is what we are going to do. First of all, we are going to put the 7 in the ones place, Angie. So we are going to put 1,2,3,5,6,7. Mark it seven times,

put seven little dots, put one in each square. I'll let you do that. OK, after that, what's our next number? What is in our tens'?

ST: Four.

T: Four. OK. Over here in the tens, we are going to write, 1,2,3,4 dots with the tens. Over here, this is ones, this tens. Did you get it, Barbara did every body do it, so far.

ST: Yes.

T: OK.

Ms. EGR

Subject: Social Studies (III) Topic: Security, occupations Word Count: 1,012

Alternation

A
Sp:35 words
(ST:12;T:23)

T: ¿Quién se acuerda de las cosas que hicimos la vez pasada con los niños; Alex?

ST: ¡Que se paren cuando pasa un carro!

T: Bien.

ST: Mirar a los dos lados.

B
E: 9 words
(ST:0;T:9)

T: Mirar a los dos lados. Muy bien. //That's right, we did talk about looking both sides,//viendo para los dos lados. Pedro?

ST: Para cuando la luz está roja.

C
Sp:15 words
(ST:6;T:9)

T: Muy bien Pedro.// Is it right that when Rose Marie was being a little girl and the light turned red, you told her that she was supposed to stop. Was that right?

D
E: 131 words
(ST:11;T:120)

ST: Yes.

T: That's what Pedro just finished telling me that when you got to the light that you are supposed to....Is that what we discussed?

ST: Yes.

T: Yes, that's very good, we did discuss that. Today we are going to talk about other things that we do. When you were helping these people, they were supposed to be careful, right?

ST: Yes.

T: If they weren't careful, what would happen to them?

ST: They could be dead.

T: They could be dead.

ST: ... run over.

T: They could be run over.

ST: ... die.

T: If something real bad happens to you, what do we call that?

ST: Danger.

E
Sp: 111 words
E: 6 words [!]
(ST:25;T:92)

T: Dangerous. Very good, it's dangerous.//Ahora, una vez platicamos de los trabajos que hacen nuestros papás. Felipe, ¿qué nos dijiste la vez pasada de lo que hacía tu papá?

ST: Trabaja en los botes.

T: Trabaja en los botes, de autobuses. ¿Quién más me puede decir lo que dijeron la vez pasada? ¿Ramona? ¿Qué hacía tu papá entonces?

ST: Es cajero.

T: Oh, es cajero. Alex?

ST: Trabaja en guerra.

T: En guerra. Está, ... es militar tu papá?

ST: Soldado.

T: Gracias, Felipe, ¿es soldado?

ST: Si.

T: Otra persona más, ¿Richard?

ST: In the army. [!]

T: ¿Qué?

ST: In the army.[!]Trocas.

T: ¿Y qué de trocas? 18
ST: Compone trocas 19
T: ¿Las compone? 20
ST: Las arregla. 21
T: ¿Las compone o las maneja. ¿Qué? ¿Las maneja ó las compone? 22
ST: Las maneja. 23
T: Si, maneja. Así que es troquero. 23
ST: Troquero. 24

F
E: 400 words
Sp: 2 words [:]
(St:44;T:356)

T: Muy bien.// Today we are going to talk about the way people can help us. 25/1
Different people can help us. For example, Felipe has mentioned to us 2
that his dad drives a bus. How can that help us? You tell me, Jackie? 3
ST: By taking you to the house. 4
T: Very good. Angie? 5
ST: Taking us to the city. 6
T: Very good. David San Miguel? You don't know how a bus driver can help 7
us? Do you have any idea? How? 8
ST: They take you wherever you want to. 9
T: Very good. They take you wherever they want to go. Now what would happen -- 10
now let's have a little skit as we had last time. Ok, Angie we need a ... 11
Well, Felipe is the bus driver. Lets make Felipe bus driver. OK. Angie, 12
pick a boy. 13
ST: David. 14
T: Please stand up. Now you are all going to laugh. I know you are going to 15
laugh. It's real funny. We are going to borrow your chair. 16
ST: Oh no, no, no. Together. 17
T: OK. The bus driver. Where do you think the bus driver goes? 18
ST: Make runs. 19
T: What's the bus driver going to do? 20
ST: Ride. 21
T: OK Angie and David are over here. You sit down. You got to sit down to 22
drive. Come on here. Here are Mr. and Mrs. Wonderful People. 23
ST: (laugh) 24
T: This is fun. This is fun. You know what? About Mrs. Wonderful. She is 25
going to have a baby. 26
ST: (laugh) 27
T: Now here is Mrs. Wonderful and Mr. Wonderful. 28
ST: No. 29
T: Go get in the car. 30
ST: No. 31
T: Here is -- let's watch her -- Mrs. Wonderful. Come on. 32
ST: Dale, Dale. 33
T: Mrs. Wonderful, yes, we have ... boy. OK, here is Mrs. Wonderful. Tell him. 34
ST: (laugh) 35
T: Come on, get seated. ... come and get the car. Here is the car. Wait, wait 36
Here is the car. 37
ST: (commotion) 38
T: OK. ... is starting the car. (noise) The car doesn't want to start. Oh 39
no, what to do. Mrs. Wonderful is going to have a baby. So what, what are 40
they going to do. 41
ST: Take the bus. 42
T: Take the bus. 43
ST: Take the bus. 44
(commotion)

T: OK, now, over. The bus has come by. They pick them up and guess what. 45
Mr. and Mrs. Wonderful get on time to the hospital. Mrs. Wonderful had 46
a beautiful baby-girl and a beautiful baby-boy. You tell me, Diana 47
Campero. You tell me how was the bus driver able to help Mr. and Mrs. 48
Wonderful? 49
ST: (laugh) 50
T: Answer my question, Diana, how was the bus driver able to help them. 51
ST: By driving them to the hospital safely. 52
T: Safely, very good. 53
ST: (clap) 54

G
Sp: 282 words
E: 2 words [!]
(ST:65;T:217)

T: Now we know that the bus driver can help. //Será posible que el soldado 55/1
también nos pueda ayudar? 2
ST: Aha, si. 3
T: A ver, Fermin. 4
ST: Ganando la guerra ayuda a la gente 5
T: Ganando la guerra ayuda a la gente. 6
ST: Para que se acabe la guerra. 7
T: Para que se acabe la guerra, muy bien. El soldado nos puede proteger. 8
Cuando nos protege el soldado, ¿nos ayuda? 9
ST: Si. 10
T: Si. Vamos a ver. Uds. creen que un troquero también nos puede ayudar? 11
ST: Si. 12
T: ¿En que forma? 13
ST: Le habla y le dice que como que una tierra ... [!] 14
T: Muy bien, necesitan la tierra quizás. Si no hubiera habido un autobus 15
para la señora ... 16
ST: Y el señor. 17
T: ... y el señor que necesitaban ir al hospital, quizás un troquero los 18
pudo haber llevado. 19
ST: La troca. 20
T: Ahora, vamos a ver. Algun doctor. 21
ST: A doctor. 22
T: Podría el también. 23
ST: No, si, si. 24
T: Si el nos puede, ¿qué? 25
ST: Ayudar. 26
T: A ver, en que forma nos puede ayudar el doctor, ¿Ramona? 27
ST: (No response.) 28
T: Jackie, ayúdale. En qué forma nos pueda ayudar el doctor? 29
ST: Cuando tenemos un bebito nos puede cuidar. 30
T: Muy bien. Maria ¿sabes como nos puede ayudar? ¿En qué forma nos 31
puede ayudar? ¿David? 32
ST: Cuando estan malos. 33
T: Exactamente cuando están malos. Así que cuando tienen algun bebé ó 34
estan malos ó ¿qué? 35
ST: Cuando le da calentura. 36
T: Cuando está enfermo o si le duele el estómago. Muy bien. A ver, ¿María 37
Teresa? 38
ST: El policía. 39
T: El policia, muy bien. 40
ST: La ambulancia. 41
T: Levanten las mano por favor. ¿Angie? 42
ST: La ambulancia. 43

	T: ¿Pedro?	44
	ST: (No response.)	45
	T: Así que tenemos aquí un ...	46
	ST: ...doctor.	47
	T: ...doctor.	48
	ST: policia, ambulancia, autobus, vaquero, ... troca.	49
	T: ¿Qué es que tienen en común estas personas? ¿Qué es lo que tienen en común? ¿Saben lo que quiere decir "común"?	50 51
	ST: No.	52
	T: Qué es igual entre todos ellos? ¿Qué es lo que pueden hacer?	53
	ST: Nos ayudan.	54
H	T: Nos ayudan. // Tomorrow, boys and girls, or the next day, I haven't decided,	55/
E: 29 words	we are going to bring some magazines and cut out pictures of people	2
(ST:0;T:29)	helping other people. Thank you.	3

Ms. EGR

Subject: Social Studies (IV) Topic: Community helpers Word Count: 585

Alternation		
A	T: OK, boys and girls, how do you all feel?	1
E: 24 words	ST: Fine.	2
(ST:4;T:20)	ST: How about you?	3
	T: Oh, I'm feeling great, Angie and Alex, you two are dismissed.	4
B	// Se acuerdan de la lección que hizo el Dr. Jacobson con Uds.?	1
Sp: 65 words	ST: Si.	2
(ST:12;T:53)	T: ¿Les gustó?	3
	ST: Si.	4
	T: ¿De qué platicaron? Melissa?	5
	ST: De policías y taxis.	6
	T: De policias y taxis.	7
	ST: Ambulancias.	8
	T: Ambulancias, ¿Stacy?	9
	ST: Dentistas.	10
	T: Muy bien, dentistas. ¿Y de qué otras cosas platicaron? ¿Fermín?	11
	ST: De doctoras y doctores.	12
	T: Aha. El Dr. Jacobson llamó estas personas con unas palabras especiales.	13
C	¿Quién se acuerda de lo que eran? ¿No se acuerda nadie? You do not	14/
E: 100 words	remember that special name that Dr. Jacobson called all these different	2
(ST:8;T:92)	people? Angie.	3
	ST: Mailmen.	4
	T: Were all of them mailmen?	5
	ST: No.	6
	T: There was a special name for them. What was it? Alex? Diana?	7
	ST: Cab and taxi.	8
	T: There are two names for that but there is another name that we want to talk about.	9 10
	ST: Helpers.	11
	T: Helpers, right. They were all helpers. They were community helpers because they are from our community and what they did was to help us. Very good. How did you feel about that. Were you comfortable?	12 13 14
	ST: Yes.	15
	T: Good. How do you feel now, Maria?	16
	ST: Fine.	17
D	T: Fine. // Hoy vamos a platicar de otras cosas y esta vez Uds. se van a ayudar	18/
Sp: 283 words	uno al otro como las [los] policias nos ayudan a nosotros y las ambulancias y	2
(ST:7;T276)	doctores.	3
	ST: ...los carteros.	4

T:Los carteros, muy bien. Como ellos nos ayudan a nosotros, nosotros entre nosotros mismos nos vamos a ayudar. Les voy a pasar una bolsa. No quiero que la abran. Y por eso tienen ... a su pareja ... ¿A quien le faltó? 5 6 7
ST:A...[mi]. 8
T:Nada más una por pareja. Muy bien. La señora Vásquez y yo tenemos ésta. Ahora aquí. Esto es lo que van a hacer. Bueno el que tiene la bolsa, va abrir la bolsa y va meter la mano. Fíjense como lo estoy haciendo. Estoy viendo lo que está en la bolsa? 9 10 11 12
ST:No. 13
T.No. Voy a levantar una cosa. Hay dos cosas en la bolsa. Una cosa y la voy a ... A ver que será ... voy a tocarla, voy a voltearla y voy a ... Ay está bien suave ésto. Es lo que van hacer Uds. pero le van a decir, Adrian le va a decir a su pareja y luego Angie va decir a la pareja de ella y Felipe le va a decir a su pareja. Cada quien le va a decir a su pareja pero nada mas si escogen una cosa. Saben lo que van a hacer? 14 15 16 17 18 19
ST:Si. 20
T:OK. Pueden hacerlo y luego les voy a preguntar que hicieron. Ahora si, vamos a empezar con Fermín y Rose Marie. Fermín, ¡párate! y dinos que es lo que tenías tú. No digas los nombres descríbelo. 21 22 23
ST:(Not audible) 24
T:¿Qué es que nos dijo Fermin de su objeto? 25
ST:Estaba chiquito. 26
T:Que estaba chiquito. Qué lo sentia chiquito. ¿Que más? 27
ST:Duro. 28

E
E: 53 words (ST:6;T:47)

T:Duro. Ahora sí. Ah.//Who remembers what Diana told us about hers? 29/
ST:Soft. 2
T:Soft. 3
ST:It's big. 4
T:It's big. Anything else? 5
ST:It's softlike. 6
T:Softlike, very good. Are all ... does everything feel the same way? 7
ST:No. 8
T:No, some felt soft, some felt hard. You know what we call the way things feel? We call it their texture. Their texture.//Todas las cosas que teníamos en nuestras bolsitas, ¿tienen la misma textura? 9 10/ 2

F
Sp: 43 words (ST:3;T:40)

ST:No. 3
T:No, unas tienen la textura muy ..... ¿qué? 4
ST:...grande. 5
T:La textura es como se siente la cosa. Una la tenía muy suave y otra la tenía muy ... 6 7
ST:Dura. 8

G
E: 17 words (ST:0;T:17)

T:Dura, muy bien.//What I would like you to do now is to put your things back into the bag. 9/1 2

Ms. EGR

Subject: Science (V) Topic: Insects Word Count: 1,033

Alternation

A
SP: 71 words (ST:17;T:54)

T:¿Qué insecto es éste? 3
ST:Un .... un chapolín. 4
T:¿Colorado? 5
ST:No. 6
T:Es un chapolín. ¿Y éste? 7
ST:Una cucaracha. 8
T:¿Saben como se llama éste? 9
ST:No. 10
T:Es un escarabajo. 11

ST:Escarabajo. 12
T:Escarabajo. 13
ST:Escarabajo. 14
T:Las cositas negras que vemos aquí mucho ¿como se llaman? 15
ST:Arañas. 16
T:Ya no muevas la silla. 17
Los animales rojas [rojos] que ven afuera que pican bien fuertes afuera. 18
ST:La hormiga. 19
T:Miren esta palabra. ¿Se dice la hache? 20
ST:No... Si... No 21
T:Decimos jormigas? 22
ST:No. 23
ST:Hormigas. 24

B
E: 112 words
Sp: 2 words[!]
(ST:13;T:99)

T:Insectos.//Does anybody know any other kind of insects that you've seen around? ¿Margie? 25/2
ST:Spider. 3
T:Spiders. Anything else, Jorge? 4
ST:Gusanos. 5
T:What? 6
ST:Worms. 7
T:Oh worms. Thank you, ... worms, gusanos or worms. 8
T:Alex? 9
ST:"Cucarachos" (said with American accent) (laughs)

T:Spring bugs, cockroaches, ah? 10
ST:(silence) 11
T:Are there any other kinds of animals that we haven't mentioned, Leslie? 12
ST:Butterflies. 13
T:Butterflies, that are insects. OK, Pedro? 14
ST:Fire ants. 15
T:Fire ants and let's get one more. OK, David? 16
ST:Snakes. 17
T:Snakes are insects? 18
ST:No. 19
ST:Teacher, Teacher. 20
T:He thinks that they are. Stacy? 21
ST:Birds. 22
T:Adrian? 23
ST:A firefly. 24
T:A firefly, we'll just call it a fly, OK? So, we have all these. Is there a special word for these? 25 26
ST:Insects. 27

C
Sp: 1 word
(ST:0;T:1)

T:Insects, we call them insects, right. OK, good.//¡Mira! 28/1
ST://No, in Spanish. 1/1

D
E: 16 words
(ST:5;T:11)

T:Oh, this one is in Spanish and that one over there. 2
ST:It's English. 3

E
Sp: 57 words
(ST:17;T:40)

T:Muy bien. Aúque ya nos [sabemos los nombres de] varios insectos. Ahora quiero preguntar ¿cuántas patas creen Uds. que tienen los insectos? 4 5
ST:Cuatro. 6
ST:Las hormigas tienen mas que cuatro. 7
ST:Ocho. 8
T:¿Ocho? 9
ST:La hormiga tiene ocho. 10

	T:	Unos de ellos tienen ¿cuantas patas?	11
	ST:	Cuatro.	12
	ST:	Ocho.	13
	T:	¿Creen que los [las] cucarachos [cucarachas] tienen dos patas nada más?	14
	ST:	Tienen cuatro.	15
	T:	Tienen que tener más que dos.	16
	ST:	Cuatro.	17
F	T:	//OK what about those butterflies? They have ...	1
E: 29 words	ST:	No.	2
(ST:8;T:21)	T:	They have wings. The butterfly can fly.	3
	ST:	Yes.	4
	T:	Pedro?	5
	ST:	Four.	6
	T:	What about the spiders?	7
	ST:	Ooohhh.	8
	ST:	Four, six, six.	9
	T:	How many?	10
	ST:	Six.	11
G	T:	//¿Quién puede decir esta palabra? A ver, esta palabra?	1
Sp: 83 words	ST:	Mrs. Ramos may I go ...	2
E: 4 words [!]	T:	No, nosotros estamos acá. ¿Qué dice esta palabra? ¿Qué dice? ¿No sabe	3
(ST:12;T:71)		nadie?	4
	ST:	Atrópolos.	5
	T:	Atrópolos. ¡Diganlo otra vez!	6
	ST:	Atrópolos.	7
	T:	¿Y Uds. saben que son los animales atrópolos?	8
	ST:	No, sí.	9
	T:	¿Qué Alex, si dices que sí. Los insectos son animales atrópolos. ¿Pueden	10
		Uds. decir ésto?	11
	ST:	Atrópolos.	12
	T:	Los insectos son animales atrópolos.	13
	ST:	Los insectos son animales atrópolos.	14
	T:	¿Y saben qué? Pertenecen a una clase de los ...	15
	ST:	Hexápolos	16
	T:	Hexápolos, hexápolos ¿Pueden decir Uds. hexápolos?	17
	ST:	Hexápolos.	18
H	T:	Muy bien. //Are those easy words for you, Richard? Can you say those?	19/1
E: 45 words		Are these easy words for you? Why don't you stand up over here, Richard ..	2
(ST:0;T:45)		with me please. Stand right over here and you can help me cut by erasing	3
I		this. Erase it! Erase it! //¿Cómo creen Uds. que se siente una cucaracha?	4/1
Sp: 56 words	ST:	Feo.	2
(ST:5;T:51)	ST:	Da cosquillas.	3
	T:	Cosquillas. ¿Cómo se siente la piel? Uds. crean [creen] que está suave ó está	4
		dura?	5
	ST:	Dura.	6
	T:	Dura. Así que quizás los insectos estén duros o tienen la piel dura.	7
		¿Cuántas patas decíamos que tenían?	8
	ST:	Cuatro.	9
J	T:	Los atrópolos de la clase hexápolos tienen nada más seis patas.//Margie,	10/
E: 77 words		do you think that they have eyes?	2
(ST:14;T:63)	ST:	Yes.	3
	T:	Gee, thank you Margie. Margie, how many eyes do you think they have?	4
	ST:	Eight.	5

ST:Some of the masters have four right here. 6
T:The what? 7
ST:The masters. 8
T:What masters? 9
ST:The queens. 10
T:The queens? Ramona? They have two simple eyes and then they have two complex eyes that are made up of a bunch of little things. The grasshopper 11 12
K
Sp: 146 words
(ST:17;T:129)
has four, it has two simple ones and two big ones.//Ahora quiero que miren esta página. Vamos a hacerla. Y ¿que dice amero arriba? El nombre y luego dice ¿qué es la fecha? 13/ 2 3
ST:Enero. 4
T:Enero ¿qué? 5
ST:Treinta y dos. 6
T:Treinta y dos? Veintiseis. Vamos a leer las palabras. Ahora dice in... ¿qué dice amero arriba? 7 8
ST:Insectos. 9
T:Insectos y abajo de insectos dice "en producción" acuérdense de ésto. 10
ST:En producción. 11
T:¿Uds. encuentran estas palabras en sus papeles? 12
ST:Si. 13
T:¿Encuentran esa palabras? 14
ST:Si. 15
T:¿Encuentran esa palabras? 16
ST:Si. 17
T:En seguida de esta palabra dice ¿qué dice?¿En un lado dice? 18
ST:Seis. 19
T:Seis, seis y luego en seguida [después] de seis dice... 20
ST:Ojos. 21
T:Y abajo en la segunda hilera tenemos el número... 22
ST:Tres. 23
T:Tres y luego está "consistencia dura" ¿Pueden decir Uds.? 24
ST:Consistencia dura. 25
T:Y luego dice ... Uds. ya han visto esta palabra, la última palabra en la segunda hilera. 26 27
ST:Ojos. 28
T:No dice ojos. En la segunda hilera. 29
ST:Alas. 30
L
E: 44 words
(ST:5;T:39)
T:Alas.//Have you heard of wings before? 31/
ST:Yes. 2
T:What animals have we talked about that have wings? 3
ST:Butterflies. 4
T:Butterflies. 5
ST:Birds. 6
T:Birds. OK, do some of our insects have wings? 7
ST:Yes. 8
T:Which one? Butterflies have wings. Are butterflies insects? I need to hear a word. 9 10
ST:Yes.// 11
M
Sp: 62 words
(ST:0;T:62)
T:¡Bajen las manos! Vamos a ver la primera oración. Dice ...¡Richard! los insectos son animales atrópolos. Así que quieren escribir en la primera linea, atrópolos. Tienen o - o - o. ¡Escriban esta palabra en la primera linea! Yo ya escribí la a..., aha. En la primera linea. Atrópolos. Te falta lo demás, el resto. Atrópolos ¡Levanten la mano si 1 2 3 4 5
N
E: 16 words
(ST:0;T:16)
ya terminaron de escribir la palabra!// That's real good Ramona. You did a good job there. OK let's go to uh... let's continue.// Dice los insectos 6/1 2/1
O
Sp: 107 words
(ST:10;T:97)
son animales -- qué es lo que dijimos que eran atró.... ¿pueden decirlo otra vez? 2 3